# May 1, 2012 Bulletin 120 and Water Supply Index reports

The May 1, 2012 Bulletin 120 (B120) and Water Supply Index (WSI) forecasts have been completed and are posted at:

B120: <a href="http://cdec.water.ca.gov/cgi-progs/iodir?s=b120">http://cdec.water.ca.gov/cgi-progs/iodir?s=b120</a>
WSI: <a href="http://cdec.water.ca.gov/cgi-progs/iodir/wsi">http://cdec.water.ca.gov/cgi-progs/iodir/wsi</a>

The projected median April-July runoff in the major forecasted river basins ranges from 32 percent on the East Walker River to 133 percent on the Scott River. Forecasted median Water Year runoff ranges from 44 percent for the Merced River to 82 percent on the Trinity River.

The gains in precipitation this month boosted the projected median April-July runoff by an average of 13 percent since the April 1 Forecast.

The WSI forecast can be summarized as follows:

Sacramento River Unimpaired Runoff Water Year Forecast 11.8 MAF

(50 percent exceedance) (65 percent of normal)

Sacramento Valley Index (SVI) 6.9

(50 percent exceedance) (Below Normal)

San Joaquin Valley Index (SJI)

(75 percent exceedance)

(Dry)

The water year classification has changed from **Dry** to **Below Normal** for the Sacramento Valley and from **Critical** to **Dry** for the San Joaquin Valley.

#### **Next Update:**

A Bulletin 120 Update for conditions on May 8, 2012 will be available Thursday, May 10, 2012.

#### **Runoff:**

Unimpaired flows for the month of April improved since last month (March) for all forecasted rivers, except the East Walker. The rivers ranged from 181 percent of average on the Klamath to 27 percent of average on the East Walker. Water year percent of average to date ranged from 112 on the Owens River to 49 percent on the Cosumnes River.

Regionally, April runoff totals stood at 119, 103, and 91 percent of average in the Sacramento River Region, San Joaquin River Region, and Tulare Lake Region, respectively.

#### **Precipitation:**

The water year to date precipitation totals for the Northern Sierra 8-Station Index was 39.6 inches (87 percent of average to date) on April 30, 2012 – a gain of 6.4 inches of precipitation in April (164 percent of the monthly average). This water year to date total amounts to 79 percent of the water year average of 50 inches.

For the San Joaquin 5-Station Index, the water year to date total was 24.0 inches (65 percent of average to date) on April 30, 2012 – a gain of 4.8 inches of precipitation in April (137 percent of the monthly average). The water year to date total amounts to 59 percent of the water year average of 40.8 inches. In both regions, April was the second month of above normal precipitation accumulation since October.

Precipitation for April (based on all available reporting gauges per basin) was 169, 153, and 201 percent of average to date for the Sacramento River Region, the San Joaquin River Region, and the Tulare Lake Region, respectively. Statewide, precipitation for April was 157 percent of normal. However, the water year cumulative precipitation through April was 76 percent of average to date and 70 percent of an average water year.

#### Snowpack:

Snowpack is monitored using two complementary methods: automatic snow sensor (or "pillow") readings and manual snow course measurements. The snow sensors give us a daily snapshot of snow conditions while the manual snow course measurements provide a monthly verification of snow conditions in locations where snow has been measured in the same manner as far back as 100 years.

The snowpack has diminished since April 1 due to the seasonal snow melting cycle. On May 1, snow sensors recorded a snow pack that was 52, 28 and 16 percent of the April 1 average in the Northern Sierra, Central Sierra, and the Southern Sierra, respectively. Statewide, the snow water equivalent based on snow pillow data was 9 inches, which is 31 percent of the historical April 1 average. This is a decrease of 24 percent since April 1.

Measurements from snow courses revealed that the snow pack in the Sacramento, San Joaquin and Tulare Lake regions were 36, 22 and 11 percent of the historic April 1 average. Statewide the snowpack was 30 percent of the historic April 1 average. This statewide average was nearly equivalent to the snow sensors statewide average.

Surveyors found 37 bare snow courses throughout the state. These bare snow courses represent about 20 percent of the total number of snow courses measured this month. The Kern and Feather River basins each had six bare snow courses, which was the greatest among the basins. The Kern River basin had bare snow courses up to 9,800 feet.

#### **Weather and Climate Outlook:**

The weather outlook for the next six days is dry and warm. Snow elevations in the Northern Sierra will range from 11000-13000 feet and in the Central and Southern Sierra the range will be from 12000-13500 feet during this time.

The NWS Climate Prediction Center's (CPC) 30-day outlook for May, last updated on April 30, 2012, suggests below normal temperatures for the Trinities and the California coastline down to San Luis Obispo. However, above normal temperatures are expected for the Central and Southern Sierras and the Mojave Desert region. The same outlook calls for below normal precipitation for the northern two thirds of the state.

The three month (May, June, July) outlook was last updated on April 19. The outlook calls for increased chances of above normal temperatures along the entire California-Nevada border including the Sierra Nevada and Mojave Desert region. The same outlook calls for increased chances of below normal

precipitation along the California-Oregon border including areas of the Klamath and Scott River basins and equal chances of above or below normal precipitation in all other areas of the state.

#### **Next Update:**

A Bulletin 120 Update for conditions on May 8, 2012 will be available Thursday, May 10.

If you have any questions regarding this forecast, please contact a member of the Snow Surveys staff. We are happy to help.

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## **Important Links**

## **Bulletin 120 (B120) Email Subscription Information**

To subscribe and un-subscribe to the B120 notification email <a href="http://listhost2.water.ca.gov/mailman/listinfo/b120">http://listhost2.water.ca.gov/mailman/listinfo/b120</a>.

## Water Supply Index (WSI) Email Subscription Information

To subscribe and un-subscribe to the WSI notification email <a href="http://listhost2.water.ca.gov/mailman/listinfo/WSI">http://listhost2.water.ca.gov/mailman/listinfo/WSI</a>

# **Full Natural Flow Data**:

Daily FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey\_ro/FNF

Monthly FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey\_ro/FNFSUM

Seasonal FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey\_ro/FLOWOUT

#### **Precipitation Data:**

Latest Northern Sierra 8-Station Precipitation Index <a href="http://cdec.water.ca.gov/cgi-progs/queryDaily?s=8SI&d=today">http://cdec.water.ca.gov/cgi-progs/queryDaily?s=8SI&d=today</a> Northern Sierra 8-Station Precipitation Tabulation Table <a href="http://cdec.water.ca.gov/cgi-progs/products/8-Stations">http://cdec.water.ca.gov/cgi-progs/products/8-Stations</a> Tab.pdf

Latest San Joaquin 5-Station Precipitation Index <a href="http://cdec.water.ca.gov/cgi-progs/queryDaily?s=5SI&d=today">http://cdec.water.ca.gov/cgi-progs/queryDaily?s=5SI&d=today</a> San Joaquin 5-Station Precipitation Tabulation Table <a href="http://cdec.water.ca.gov/cgi-progs/products/5-Stations">http://cdec.water.ca.gov/cgi-progs/products/5-Stations</a> Tab.pdf

2010 WY Precipitation Summary

http://cdec.water.ca.gov/cgi-progs/precip/PRECIPSUM

## **Snow Data:**

**Latest Snow Sensor Report** 

http://cdec.water.ca.gov/cgi-progs/snow/PAGE6

Latest Statewide Summary of Snow Water Equivalents

http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ

Monthly Snow Course Report

http://cdec.water.ca.gov/cgi-progs/snow/COURSES

### **Extended Regional Forecasts:**

California Nevada River Forecast Center 6 Day QPF and Snow Level Forecast

http://www.cnrfc.noaa.gov/awipsProducts/RNOHD6RSA.php

Climate Prediction Center One-Month Outlook Forecasts

http://www.cpc.noaa.gov/products/predictions/30day/

Climate Prediction Center Three-Month Outlook Forecasts

http://www.cpc.noaa.gov/products/predictions/90day/

## **Drought Information:**

California Drought Information

http://www.water.ca.gov/drought/

U.S. Seasonal Drought Outlook

http://www.cpc.ncep.noaa.gov/products/expert assessment/seasonal drought.html